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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,999	03/12/2001	Matthijs Hendrik Keuper	PHNL 000103	8882
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PATENT LAW GROUP LLP 2635 NORTH FIRST STREET SUITE 223 SAN JOSE, CA 95134			EXAMINER GILMAN, ALEXANDER	
			ART UNIT 2833	PAPER NUMBER

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/803,999

Applicant(s)

KEUPER, MATTHIJS HENDRIK

Examiner

Alexander D. Gilman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8-14,16,17 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14,16,17 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-6,8-13,20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 4 recites "a light-emitting surface disposed".

It is unclear which element of the device is related to the light-emitting surface. The surface is not an element by itself.

Claim 22, line 1 recites "...a ratio of a size of the first portion to a size of the second portion is 1:1 . That phrase is unclear, since independent claim 1, recites "a second portion of the light-emitting surface without the phosphor is surrounded by the first portion". The second portion which surrounds the first portion cannot be of the same size as the portion which it surrounds.

Because of 112 problem, claim 22 not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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1. Claims 1, 3-6, 8, 9, 11-13, 20, 23-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Vriens.

With regard to claims 1, 3-5, 8, 9, 11, 13, 23, 24, 25, 27 Vriens (US 4,822,144) disclose (Fig. 8) an a light-emitting device comprising:

a light emitting diode (col. 3, lines 51-52) emitting a light of a first wavelength;

a light-emitting surface (the surface of 10) , and

a phosphor layer (r.n.8, for example -R) which is provided on a first portion of light emitting surface wherein a second portion of the light-emitting surface (portion covered by G and B) without the phosphor (the portion without R) is surrounded by the first portion (alternatively, the second portion is a space between R and G).

With regard to claims 6, 26 Vries discloses a light transmitting layer (13).

With regard to claim 9, Vries discloses the device structure which is manufactured according to claim 1 limitations.

With regard to claims 20 and 21, Vries discloses a first (R) and a second (G) types of phosphor.

With regard to claim 8, Vries discloses a optical elements for mixing (14).

### ***Claim Rejections - 35 USC § 103***

1. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vriens in view of Duggal et al

Vries discloses all of the limitations except for producing white light.

Duggal et al (US 6,294,800) disclose (col. 2, lines 13-29) that converting the LED radiation energy with some phosphor compositions produces substantially white light.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Johnson son et al with the phosphor compositions , as taught by Duggal et al, to achieve substantially white light.

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2. Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vries in view of Nakamara et al

Vries discloses all of the limitations except for phosphor deposited by screen printing.

Nakamara et al disclose phosphor deposited by screen printing (col. 3, lines 33-34).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Vries with a phosphor deposited by screen printing, as taught by Nakamara et al, to achieve precise disposition of the phosphor elements.

#### ***Allowable Subject Matter***

Claims 14, 16, 17, 21 allowed.

No prior art has been found to anticipate or render obvious the presently claimed subject matter.

Specifically, none of the prior art of record discloses the combination of the limitations presented including the plurality of regions of phosphor forming a chessboard pattern and the plurality of regions of phosphor being separated by regions of the light-emitting surface without phosphor.

#### ***Response to Arguments***

Applicant's arguments filed 07/21/2005 regarding claims 1, 9, 23 have been fully considered but they are not persuasive.

Applicants argue that the prior art Vriens describes "radiation source 10" not a light-emitting device. However, a broad term "radiation source" includes, incorporates a term "light-emitting device", since --radiation-- means --energy radiated or transmitted in the form of rays, waves, or particles--(The Heritage Dictionary, 4<sup>th</sup> Ed).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date

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of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D. Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10/14/2005

  
**ALEXANDER GILMAN**  
**PRIMARY EXAMINER**